

Mellicta athalia Rottemburg in East Cornwall, 1974

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With another year of sharp decline in our butterfly population, and one of the poorest entomological seasons for many years, it is extremely encouraging to be able to record series of exciting events in a small East Cornish colony of the Heath Fritillary, *Mellicta athalia* Rottemburg.

Towards the end of March a young friend of mine told me that he had found a remarkable concentration of *athalia* larvae a few miles from a locally known colony near the River Tamar, and at the first opportunity offered by a fine and bright afternoon he directed me to the spot.

We drove down a lane into the western depths of a little valley and parked the car by a stream. The natural beauty of the environment had been all but destroyed by the ravages of the *Forestry Commission*, and young conifers as yet only a foot or two in height had been planted almost everywhere.

The larvae were immediately in evidence feeding voraciously on Foxglove (*Digitalis purpurea* L.) growing on the south-facing bank of the lane, and for about one hundred yards the population was dense — every plant supporting some and many being attacked by thirty or more at once. The majority were low down, almost on the narrow verge adjoining the tarmac, thinning out towards the top of the bank, and along the short length of the lane alone there must have been well over two thousand. A hasty walk along an open forest track beside the lane and over the steep northern slopes resulted in finding larvae almost everywhere. An area within the lower confines of the valley comprising no more than an estimated five acres must have contained around ten thousand. It was interesting to note that although there was plenty of Cow-wheat (*Melanopyrum pratense* L.) and Ribwort Plantain (*Plantago lanceolata* L.) available, neither held any attraction for the vast appetite of this horde. They all made straight for Foxglove, Speedwell, Yarrow and Wood-sage. At Lydford and elsewhere over the nearby border in Devon, Plantain alone is the foodplant of the species.

It was plain that whatever happened during the next two months there would be a lot of butterflies, and I resolved to make another trip to the site before the end of May.

Down here in the South-west we expect *athalia* males to begin to emerge during the second week of June in an average season. There was no indication that Spring was unusually early, in fact rather the opposite seemed to be the case, and the weather was cold and unsettled when I revisited the valley on the 31st May. However, even before the sun had broken through after a wet and misty morning I found *M. athalia*, *Euphydryas aurinia* Rott., *Boloria (Clossiana) euphrosyne* L. and *B. (C.) selene* D. & S. on the wing, and some of the *athalia* had clearly been out for several days — the earliest I have recorded.

After more rain I went out again on the 3rd June, and the sun obliged by appearing for quite long intervals though there was a cold, strong wind. Numbers were already building up well and I checked about forty *athalia* fluttering up from the long grass in the first half-hour. I climbed up the somewhat sheltered North side of the valley on to a stoney ledge which had at one time carried a narrow-gauge railway from a nearby mine, and as I began to walk round a bend into the north-west wind I disturbed several butterflies from rest which were carried away into the valley as soon as they were airborne. Then another appeared, trying to fly into the wind keeping very low. Despite its rapid movement I could see at once that it was quite different in colour and marking and promptly netted it for examination. It was a fresh and magnificent ab. *cymothoe* Bertolini. Having been with Baron C. G. M. de Worms at Lydford last year, when we together saw (and he took) a perfect female ab. *corythalia* Hübner, I had a feeling that "*navarina*" might soon follow "*eos*". But this was only the beginning of what was to be a most remarkable series of events.

Delighted with my prize, I resolved to spend as much time as possible during the next few weeks of the flight season checking specimens for aberration, and this immensely tiring task proved very rewarding.

At the peak of emergence there must have been well over a thousand *athalia* on the wing, together with many *selene*, and I must have examined and re-examined many insects quite a few times. In fact several became "old friends" over a period of days and could be recognised immediately.

The next outstanding aberration was a male ab. *tetramelana* Cabeau in perfect condition. It was flopping along over some Dandelions, not far from the spot where *cymothoe* was found, in warm sunshine at mid-day on 5th June.

At 2.45 p.m. on the 7th, just before packing up to return home, a female ab. *corythalia* Hübner jumped up from among some diminutive conifers in long grass down near the lane; and at 5 p.m. the following day, after several hours searching the length and breadth of the area, I took an extreme male ab. *melanoleuca* Cabeau. It was perched invitingly on Fern with wings closed, freshly emerged.

Just before mid-day on 10th June, in warm sunshine between showers and again up on the old railway embankment, a male ab. *corythalia* Hübner appeared flying over Red Campion (*Melandrium rubrum* Garcke), and during the afternoon an interesting male ab. *obsoleta* Tutt was caught among brambles and clumps of wild flowers near the stream.

The 11th is memorable for an unusual melanic male with heavy suffusion of black markings on all four wings, approaching *cymothoe*.

On 12th June the short spell of fair weather began to break up, but around noon and before the sun disappeared behind heavy cloud I had netted no less than three major aberrations. The first was a very extreme male ab. *cymothoe* Bertolini taking

nectar from early Bramble blossom. Unfortunately it was a little worn, and I wondered how it was that I had failed to meet up with it sooner! The second was a female ab. *nov.*, a very large specimen with primrose-yellow ground colour and black and orange markings — a really beautiful creature. Lastly, another male ab. *corythalia* Hübner, a little less extreme than earlier examples with two rows of orange spots on one hindwing and only one row on the other.

The weather continued wet for a week, and with this splendid series of trophies I had every reason to be content. However, when 20th June dawned clear and bright I cancelled other arrangements and returned to the site yet again. What a day this proved to be! By 10 a.m. it was really warm, and literally every step I took in the long grass and among the conifers put up three or four *athalia*. Numbers were now at peak, and there were scores of large and richly coloured females, pairs mating, with worn and fresh males everywhere, and I decided to cover the ground in six feet wide strips. With a single sweep of the net I could take several specimens, so individual examination was just out of the question. I had become so familiar with the habits and behaviour of *athalia* that I had no difficulty in spotting even minor variations as they flew rather feebly around, and I had ceased to pay very much attention to the many specimens which fall into this category. After an hour or so plodding up and down in the coarse undergrowth, stumbling repeatedly as the Brambles trapped my feet, I paused to wipe the perspiration from my face. From a batch of shaded Fern a butterfly flew lazily out into the sunshine and as the rays caught its wings it appeared almost white. Could it be so worn, I thought, as to be virtually transparent? Its flight was quite unmistakable, and as with most others of the species I took it with consummate ease. It proved to be perfectly fresh, with type markings and pattern, but the ground colour was almost white — a very good male example of ab. *latonigena* Spul. Within half an hour I took another equally extreme but larger specimen of the same aberration!

On my way back to the car I saw what I thought to be an extremely small male, but it turned out to be a perfect dwarf female. It was an unusually spirited flyer and very nearly managed to escape.

Finally, I found what I consider to be the prettiest aberration of them all — a female ab. *nov.* with the base and central areas of the forewings heavily suffused with black and bright red, orange and yellow spots and patches elsewhere on deep fulvous ground colour.

From 21st June onwards no further variation was apparent in the colony and by mid-July the few remaining butterflies were very worn and tired.

Looking ahead it is evident that the butterfly cannot survive here for more than a few years, and it is extremely doubtful whether any suitable communications exist with other localities in the vicinity. Under all natural conditions *athalia* is a remark-

ably hardy and tenacious species, and although extremely local it is usually plentiful where it is found. If, however, it is to survive man's demands upon nature it needs determined and properly organised protection while there is yet time.

There is no doubt at all in my mind that the S.E. *athalia* is a different race from the S.W. *athalia*, and careful study will bring forth interesting and edifying results.

CHLOROCLYSTIS CHLOERATA (MABILLE) IN KENT. — I beat out three half-grown larvae of this moth from *Prunus spinosa* L. at Cudham, Kent on 27th April 1975. I believe this is the first time this species has been taken in the county. — B. K. WEST, 36 Briar Road, Bexley, Kent.

PYRONIA TITHONUS L. AB. ALBIDUS COCKERELL IN THE ISLE OF WIGHT. — I recorded a female specimen of this rare aberration near Ventnor in 1973 (*Ent. Rec.*, 86: 272). Another ab. *albidus* was captured in the same locality on 4th August 1974 which was also a female, but again no eggs were obtained. — T. D. FEARNEHOUGH, 26 Green Lane, Shanklin, Isle of Wight.

COLEOPHORA TROCHILELLA (DUPONCHEL), ISOPHRICTIS STRIATELLA (DENIS & SCHIFFERMULLER) AND ECTOEDEMIA ERYTHROGENELLA (DE JOANNIS) IN NORTH KENT. — On 27th May 1974, I found some *Coleophora* cases feeding on *Tanacetum vulgare* (Linn.), Tansy, at Cliffe chalk pit, Kent. The cases were identical to those of some *Coleophora trochilella* (Duponchel) feeding on *Achillea millefolium* (Linn.), Yarrow, and *Artemisia vulgaris* (Linn.) Mugwort, nearby. The moths failed to emerge, but it is very probable that these cases would also have produced *trochilella*.

Later in the year, on 11th August, I was looking for *Platyptilia ochrodactyla* (Denis & Schiffermuller) after dark on the flower heads of these same Tansy plants. Instead of the plume, I was very pleased to find a number of worn specimens of *Isophrictis striatella* (Denis & Schiffermuller). This species was rediscovered by Col. W. B. L. Manley in 1956 on the banks of the Medway, near Maidstone. The following year, S. Wakely found the larvae and asked fellow entomologists to look for it (*Entomologist's Record*, 69: 257-8). Mr. John Roche tells me that he has taken it at Dungeness, Kent, recently. Has it been taken in any other new localities?

In February this year, at the same locality, I also found a few mines of the recently discovered *Ectoedemia erythrogenerella* (de Joannis). The mines were not fully formed, the larvae apparently having died within the mine. I would like to thank A. M. Emmet for confirming the identity of the mines, which constitute the third record for Kent. — STEVEN E. WHITEBREAD, 2 Twin Cottage, Grove Farm, Higham, Nr. Rochester, Kent. 1.v.75.